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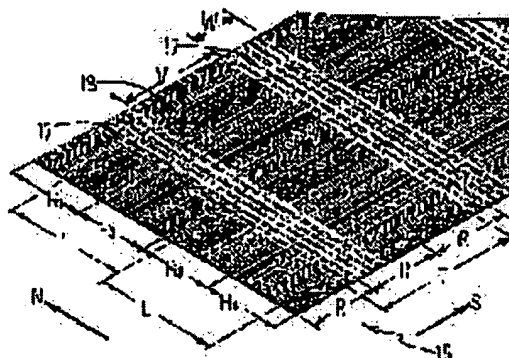
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(54) INSTALLATION METHOD FOR TILE CARPET

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an installation method for tile carpet, describing a beautiful view natural and full of variety and giving peace of mind on the installation surface.

SOLUTION: This installation method for the tile carpet comprises spreading and checkering a tile carpet 11 obtained by laminating a backing layer 16 on a tufted pile fabric 15 and cutting to be square, wherein, in tufting, six or more pile yarns having different externals are arranged, the repeat interval L of vertical stripes, formed by parallelly arranging the pile yarns, is ≥ 0.4 but noninteger times of size R in every direction of the tile carpet, and $\geq 70\%$ pile yarns in each section H1 of the tile carpet divided by the size R are common to another section H2 and the number of the common pile yarns between the section H1 and the section H2 is ≥ 6 .



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METHOD FOR WORKING CARPET TILES

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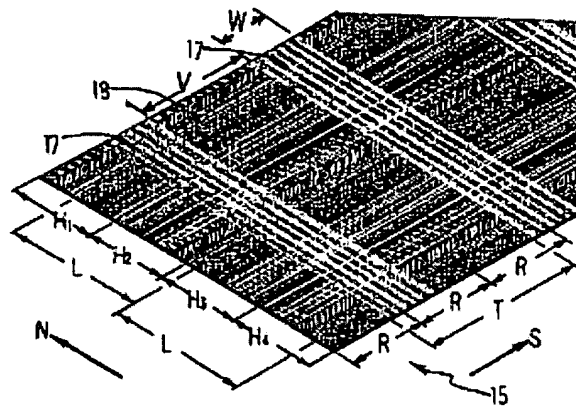
Abstract

Problems

To draw a beautiful appearance that is natural, has a sufficient change, and gives peace of mind on the working surface of carpet tiles.

Means to solve

In a method for working carpet tiles that spreads carpet tiles 11, in which a backing layer 16 is laminated onto a tufted-pile linen and silk 15 and cut into a square shape, in a checkered pattern, six or more types of pile yarns with different appearances are arranged when tufting, the repeat interval L of the vertical-stripe pattern constituted by arranging the pile yarns in parallel is set to 0.4 times or more, a noninteger number of times, the vertical and horizontal length R of the carpet tile, 70% or more pile yarns of the total number of pile yarns included in each section H_1 of the array of the pile yarns being partitioned by the vertical and horizontal length R of the carpet tile contains a type common to the pile yarns included in another section H_2 , and the number of type of pile yarns common between the sections H_1 and H_2 is set to six or more types.



Claims

1. A method for working carpet tiles, characterized by the fact that in a method for working carpet tiles that spreads carpet tiles (11), in which pile yarns (A-G) are arranged at an interval (needle gauge P) of 2.5-4.0 m/m and tufted at a stitch interval (stitch gauge Q) of 1.5-3.5 m/m on a base fabric (13) and a backing layer (16) is laminated onto the back of a tufted-pile linen and silk (15) with a pile (14) having height from the base fabric (pile thickness) in the range of 2-7 m/m and cut into a square shape with one edge length (R) of 30-60 cm while fitting the vertical and horizontal directions to the needle gauge direction (N) and the stitch gauge direction (S), on a floor surface while matching the peripheral edges in a grid shape in which the peripheral edges (12) are vertically and horizontally arranged in a linear shape, (a) six or more types of pile yarns (A-G) with different appearances due to the difference in fiber material, color, single yarn size, number of twists, twist direction, total number of fibers, number of single yarns, fiber crimp rate, etc., are arranged in a vertical-stripe pattern on the pile surfaces when tufting; (b) the repeat interval L of the vertical-stripe pattern being constituted by arranging said six or more types of pile yarns (A-G) in parallel is set to 0.4 times or more, a noninteger number of

times, the vertical and horizontal size (R) of the carpet tile (11); (c) 70% or more pile yarns of the total number of pile yarns included in each section ($H_1 \cdot H_2 \cdot H_3 \cdot H_4$, etc.) of the array of said six types of pile yarns (A-G) being partitioned by the vertical and horizontal size (R) of the carpet tile (11) has a type common to the pile yarns included in other sections ($H_2 \cdot H_3 \cdot H_4$, etc.) with any position in the needle gauge direction (N) as reference; (d) and the number of types of pile yarns common between the section (H_1) and the sections ($H_2 \cdot H_3 \cdot H_4$, etc.) is set to six or more types.

2. The method for working carpet tiles of Claim 1, characterized by the fact that in the method for working carpet tiles of Claim 1, high piles and low piles are selectively formed by certain pile yarns.

3. The method for working carpet tiles of Claim 1, characterized by the fact that in the method for working carpet tiles of Claim 1, cut piles and loop piles are selectively formed by certain pile yarns.

4. The method for working carpet tiles of Claim 1, characterized by the fact that in the method for working carpet tiles of Claim 1, horizontal stripes (17) in the needle gauge direction (N) are formed on the pile surfaces in accordance with the difference in the pile length of high piles and low piles or the pile shape of cut piles and loop piles, and the repeat interval (T) of the horizontal stripes (17) is set to 0.4 times or more, a noninteger number of times, the horizontal and vertical length (R) of the carpet tile (11).

Detailed explanation of the invention

[0001]

Technical field of the invention

The present invention pertains to a method for working carpet tiles that expresses a beautiful appearance on a working surface.

[0002]

Prior art

Carpet tiles are formed by cutting wide carpet, onto which a thick backing layer is laminated, into a square shape, and as shown in Figure 7, they are spread one sheet at a time on the floor surface while alternating the vertical and horizontal directions so that a checkered pattern may be drawn. Its finished floor surface (hereinafter, called a working surface) exhibits a neat beautiful appearance in which the peripheral edges of each carpet tile are aligned straight, vertically and horizontally. However, if there is a slight scattering in the vertical and horizontal size of the carpet tiles, when they are spread, the scattering appears gradually as a large shift, and the array state of the spread carpet tiles becomes nonuniform. In order to avoid such an

inconvenience, the control of the vertical and horizontal length R of the carpet tiles is strict in the manufacturing processes of the carpet tiles.

[0003]

As the carpet tiles, there are monochromatic plain carpet tiles in which pile surfaces have no pattern, carpet tiles with small patterns such as snowflake pattern, piece pattern, stripe pattern, and spot pattern in which the repeat of patterns is not noticed, and carpet tiles with pattern images in which figure patterns such petals, leaves, stalks are radially drawn. However, the carpet tiles in which continuous figure patterns, such as a jigsaw puzzle figure pattern, between two sheets of carpet tiles are drawn to avoid the pattern shift due to scattering of the vertical and horizontal R are not manufactured without a special order and are generally not on the market. Then, in the carpet tiles with imaged patterns, the periphery of the figure patterns is cut off in a plain pattern to avoid the pattern shift due to scattering of its tailoring length R , and in its tailoring process, the figure patterns are tailored, that is, roughly cut slightly wider than a prescribed vertical and horizontal length R . Then, the figure patterns are aligned and finished to the tailoring length R , according to the standards, by tailoring and removing the extra length of the periphery. Thus, careful attention is required for the alignment of the figure patterns.

[0004]

Therefore, the continuous geometric patterns having a fixed repeat interval in which no special added value is generated, such as checkered patterns, striped patterns, and grid patterns, although strict control is required for the pattern shift and the vertical and horizontal length R , are not adopted in the carpet tiles. For this reason, almost all carpet tiles on the market are simple, plain carpet tiles and small-pattern carpet tiles that do not cause the pattern shift problem.

[0005]

Problems to be solved by the invention

The working surface on which the plain carpet tiles or small-pattern carpet tiles are spread, as shown in Figure 7, exhibits a regular, neat, beautiful appearance in which it is aligned in a linear shape at the peripheral edges 12 of the carpet tiles 11 arranged on the floor surface. However, almost all carpet tiles being worked are the plain carpet tiles or small-pattern carpet tiles, and they are not particularly new in terms of design, though there is a difference more or less in the hue and the small patterns of the pile surfaces. Also, no especially beautiful appearance is noticed from the working surface. For these reasons, the working surface in which the peripheral edges are vertically and horizontally orderly aligned in a linear shape gives the

impression that it is artificially aligned in a controlled linear shape, and sometimes a stiff constrained impression due to the control is also given.

[0006]

Objective of the invention

Accordingly, the objective of the present invention is to provide a working surface of carpet tiles that is aesthetically natural, has a sufficient change, and provides lively motion and peace of mind.

[0007]

Means to solve the problems

A first feature of the present invention is a method for working carpet tiles characterized by the fact that in a method for working carpet tiles that spreads carpet tiles (11), in which pile yarns (A-G) are arranged at an interval (needle gauge) P of 2.5-4.0 m/m and tufted at a stitch interval (stitch gauge) Q of 1.5-3.5 m/m on a base fabric (13) and a backing layer (16) is laminated onto the back of a tufted-pile linen and silk (15) with a pile (14) having height from the base fabric (pile thickness) in the range of 2-7 m/m and cut into a square shape with one edge length (R) of 30-60 cm while fitting the vertical and horizontal directions to the needle gauge direction (N) and the stitch gauge direction (S), on a floor surface while matching the peripheral edges in a grid shape in which the peripheral edges (12) are vertically and horizontally arranged in a linear shape, (a) six or more types of pile yarns (A-G) with different appearances due to the difference in fiber material, color, single-yarn size, number of twists, twist direction, total number of fibers, number of single yarns, fiber crimp rate, etc., are arranged in a vertical-stripe pattern on the pile surfaces when tufting; (b) the repeat interval L of the vertical-stripe pattern being constituted by arranging said six or more types of pile yarns (A-G) in parallel is set to 0.4 times or more, a noninteger number of times, the vertical and horizontal size (R) of the carpet tile (11); (c) 70% or more pile yarns of the total number of pile yarns included in each section H_1 ($H_2 \cdot H_3 \cdot H_4$, etc.) of the array of said six types of pile yarns (A-G) being partitioned by the vertical and horizontal size (R) of the carpet tile (11) has a type common to the pile yarns included in other sections ($H_2 \cdot H_3 \cdot H_4$, etc.) with any position in the needle gauge direction (N) as reference; (d) and the number of types of pile yarns common between section (H_1) and section (H_2) ($H_3 \cdot H_4$, etc.) is set to six or more types.

[0008]

A second feature of the present invention is that in addition to the above-mentioned first feature, high piles and low piles are selectively formed by certain pile yarns.

[0009]

A third feature of the present invention is that in addition to the above-mentioned first feature, cut piles and loop piles are selectively formed by certain pile yarns.

[0010]

A fourth feature of the present invention is that in addition to the above-mentioned first through third features, horizontal stripes (17) in the needle gauge direction (N) are formed on the pile surfaces in accordance with the difference in the pile length of high piles and low piles or the pile shape of cut piles and loop piles, and the repeat interval (T) of the horizontal stripes (17) is set to 0.4 times or more, a noninteger number of times, the horizontal and vertical size (R) of the carpet tile (11).

[0011]

Embodiments of the invention

In the present invention, "0.4 times or more, a noninteger number of times" or "0.6 times or more, a noninteger number of times" means that even at 0.4 times or more, the vertical and horizontal length R of the carpet tiles 11 is twice the repeat interval L of the vertical-stripe patterns or the repeat interval L of the vertical-stripe patterns is an integer of 2 times, 3 times, 4 times, etc., the vertical and horizontal length R of the carpet tiles 11, so that the carpet tiles in which the array sequence (vertical-stripe patterns) of six or more types of pile yarns A-G are matched appear among several sheets of carpet tiles which are tailored in the manufacturing processes and arranged in the needle gauge direction N. Figure 6 is an oblique view showing a tufted-pile linen and silk 15 on which piles 14 are formed by tufting seven types of pile yarns in total of pile yarns A, pile yarns B, pile yarns C, pile yarns D, pile yarns E, pile yarns F, and pile yarns G with different colors on a base fabric 13 and shows a state in which these seven types of pile yarns A-G are irregularly arranged. As shown in Figure 6, in the present invention, since six or more types of pile yarns A-G with different appearances are used, vertical stripped patterns are formed on the pile surfaces as shown in Figure 1. However, if the repeat interval L of the vertical-stripe patterns being constituted by arranging six or more types of pile yarns A-G is 0.6 times or more, a noninteger number of times, the vertical and horizontal length R of the carpet tiles 11, as shown in Figure 1, a pattern shift due to the mismatch of the repeat interval L and the vertical and horizontal length R of the carpet tiles 11 is caused in the vertical-stripe patterns (18) of several sheets of carpet tiles that are tailored in the manufacturing processers and arranged in the needle gauge direction N, so that the vertical-stripe patterns of these several sheets of carpet

tiles are different from each other and are random vertical-stripe patterns without regularity (repeat) in the array sequence of the vertical stripes 18 (pile yarns A-G) of each carpet tile.

[0012]

When high piles and low piles with a length difference of 3 m/m or more are selectively formed by certain pile yarns constituting the vertical-stripe patterns or cut piles and loop piles are selectively formed by certain pile yarns, an appearance difference due to the difference in the pile shape of the high piles and the low piles or the cut piles and the loop piles is caused, so that the number of pile yarns is increased. Thereby, with the difference in the pile shape, the pile surfaces have a sufficient aesthetic change, and very random vertical-stripe patterns without regularity (repeat) in the array sequence of the vertical stripes 18 (pile yarns A-G) are drawn. Needless to say, the size (tufting width or horizontal width) in the needle gauge direction N of the tufted-pile linen and silk 15 is twice or more of the vertical and horizontal length R of the carpet tiles, and two more sheets of carpet tiles 11 are formed in the needle gauge direction N. In general, the carpet tiles are manufactured by tailoring a carpet in which a backing layer 16 is laminated onto the tufted-pile linen and silk 15 with a vertical and horizontal length R of 50 cm and an effective width of 200 cm (Figure 1), and several tens of carpet tiles are packaged as one set. Thus, as the carpet tiles of the present invention, several tens of sheets of several types of carpet tiles with different vertical-stripe patterns tailored in the needle gauge direction N are packaged as one set, and after unpacking the package, the carpet tiles are sequentially worked. Figure 2 shows a working surface in which four types of said carpet tiles are spread on a floor surface while changing the needle gauge direction N and the stitch gauge direction S by 90° to the adjacent carpet tiles in all directions and matching the peripheral edges in a grid shape. Figure 3 shows a working surface in which four types of said carpet tiles are spread on a floor surface while aligning the needle gauge direction N and the stitch gauge direction S in the same direction to the adjacent carpet tiles in all directions and matching the peripheral edges in a grid shape.

[0013]

In accordance with the difference in the pile length of the high piles and the low piles or the difference in the pile shape of the cut piles and the loop piles, when horizontal stripes 17 continuous in the needle gauge direction N are formed on the pile surfaces and the repeat interval T of the horizontal stripes 17 is 0.4 times or more of the vertical and horizontal length R of the carpet tiles 11, preferably 0.7-1.8 times, a noninteger number of times, and more preferably 0.8-1.4 times, a noninteger number of times, since the positions where the horizontal stripes 17 appear are tailored and different in each of several sheets of carpet tiles in the stitch gauge

direction S, almost all of the tailored carpet tiles are different in the appearance due to the difference in the arrangement of the horizontal stripes 17 and the vertical stripes 18. In case the horizontal stripes 17 are formed in a strip shape, the width W of the horizontal stripes 17 with a strip shape is narrower than the vertical and horizontal length R of the carpet tiles 11, preferably half or less of the vertical and horizontal length R of the carpet tiles 11. However, the width V of the vertical striped part is sandwiched by the band-shaped horizontal stripe 17, and the band-shaped horizontal stripe 17 may also be wider than the vertical and horizontal length R of the carpet tiles 11. Thus, the carpet tiles are largely divided into two types of carpet tiles in which only the vertical stripes 18 appear and the carpet tiles in which the horizontal stripes 17 and the vertical stripes 18 appear. Figure 4 shows the tufted-pile linen and silk 15 in which the band-shaped horizontal stripes 17 with a repeat interval T of 78 cm and a width W of 20 cm are drawn on the tufted-pile linen and silk with an effective width of 200 cm shown in Figure 1. Figure 5 is a working surface in which the carpet tiles using the tufted-pile linen and silk 15 are spread on a floor surface while changing the needle gauge direction N and the stitch gauge direction S by 90° in all directions and matching the peripheral edges in a grid shape.

[0014]

As shown in Figure 5, even if the appearance of the vertical-stripe patterns and the horizontal-stripe patterns is different, each carpet tile has the same vertical and horizontal length R and has six or more types of vertical-stripe patterns in which stripes with different colors are irregularly arranged, 70% or more pile yarns have the same appearance, and the hue of the pile surfaces is the same. For this reason, the array of the pile yarns A-G is different in the fine parts of the vertical-stripe patterns, it is not noticed at a glance, and even if the carpet tiles with different appearances are worked by matching the peripheral edges, an impression in which the carpet tiles with different patterns or lots are mixed is not given.

[0015]

In general, the pile yarns with the same color are used in each carpet sample being distributed by several carpet sales companies, and in case sample pieces (tailored pieces of the carpets) with only different pattern constitutions are attached, the sample pieces cut out of the products (carpets) of certain companies cannot be specified simply by looking at the sample pieces of the products (carpets), and the origins of the products are difficult to discern. Similarly, even if the carpet tiles with different appearances are worked into an orderly grid pattern, an impression in which carpet tiles with different patterns or lots are mixed is not given, and an impression in which the carpet tiles are the same pattern and the same lot is given.

[0016]

In particular, if six types more of pile yarns are arranged so that six or more of the same types of certain pile yarns may not be continuously adjacent to each other over three or more stitch columns more and two types of certain pile yarns among six or more types of pile yarns A-G may not be arranged adjacently to each other in 10 or more stitch columns, that is, so that the array sequence of various types of pile yarns included in the array part of a certain ten or more columns within the repeat interval L of the vertical-stripe patterns and the array part of another ten or more columns may be different in these array parts, and the same type of piles are not adjacent or parallel with each other in any of ten or more columns of the array parts, seams 19 between the adjacent carpet tiles exhibit an appearance similar to part of the vertical-stripe patterns, and are buried in the vertical-stripe patterns and become indistinct. For this reason, the working surface appears as if the carpet tiles are continuous without a seam, and from such a working surface, the artificial line in which the peripheral edges of the carpet tiles are carefully aligned and worked in a linear shape is difficult to notice. Along with the irregularity in the vertical-stripe patterns, peace of mind like a free release and a lively motion are felt.

[0017]

These aesthetic effects are from the irregularity of the vertical-stripe patterns and the visual effect due to the similarity of the hue of each carpet tile, and in order to increase these effects, (1) the type of pile yarns A-G is increased to ten or more types without being limited, (2) six or more types of pile yarns A-G are arranged so that six or more types of certain identical pile yarns (B) will not be continuously adjacent to each other over three or more stitch columns, and (3) the type of pile yarns being commonly included in each section $H_1 \cdot H_2 \cdot H_3 \cdot H_4$, etc., of the array of the pile yarns partitioned by the vertical and horizontal length R of the carpet tiles is increased to ten or more types without being limited.

[0018]

More preferably, (4) in the section $H_1 (H_2 \cdot H_3 \cdot H_4, \text{etc.})$, the same band-shaped stripes 20 with the same type of pile yarns and the same array sequence as those of band-shaped stripes 20 being constituted by the array of several types of pile yarns included in the interval K in the needle gauge direction N of 1/ten or more of the vertical and horizontal length R of the carpet tiles are not formed for more than three stripes. In other words, even if the wide band-shaped stripes 20 with the same appearance are formed in the section, the number is limited to two stripes, so that the appearance of the carpet tile is not characterized by the wide band-shaped stripes 20, that is, the vertical-stripe patterns are not approximate to several carpet tiles tailored and arranged in the needle gauge direction N.

[0019]

More preferably, (5) the change rate between each section H_1 and H_2 ($H_3 \cdot H_4$, etc.) of at least five types of each pile yarn among ten or more types of common pile yarns between a certain section H_1 and another section H_2 ($H_3 \cdot H_4$, etc.) is set to 50% or more. In other words, if the number of pile yarns in a certain section H_1 in which optional types of pile yarns are most frequently included is 100 pieces, the number of pile yarns in a certain section H_2 ($H_3 \cdot H_4$, etc.) in which the minimum number of same type of pile yarns are included is set to 50 pieces or more.

[0020]

More preferably, (6) the repeat interval L of the vertical-stripe patterns being constituted by arranging six or more types of pile yarns A-G is increased without being limited to 0.8-1.4 times, a noninteger number of times, the vertical and horizontal length R of the carpet tiles 11, or 2.1 times or more, or 3.1 times or more, a noninteger number of times, the vertical and horizontal length R of the carpet tiles 11. In an extreme case, the repeat interval L of the vertical-stripe patterns is set to the tufting width (horizontal width) or greater of the tufted-pile linen and silk 15, and the array sequence of the pile yarns is not repeated (no repeat). Similarly, (7) the repeat interval T of the horizontal stripes 17 drawn by the difference in the pile length and the difference in the pile shape is also increased, without being limited, to 0.8-1.4 times, a noninteger number of times, the vertical and horizontal length R of the carpet tiles 11, or 2.1 times or more, or 3.1 times or more, a noninteger number of times, the vertical and horizontal length R of the carpet tiles. In an extreme case, the horizontal-stripe patterns drawn over the entire length of the tufted-pile linen and silk 15 are not repeated.

[0021]

More preferably, as mentioned above, (8) six or more types of pile yarns A-G are arranged alternately, so that two types of certain pile yarns (C · E) among six or more types of pile yarns A-G will not be arranged adjacent to each other, in ten or more stitch columns. Also, (8)[sic; (9)] the array sequence of various types of pile yarns included in the array part of a certain ten or more columns within the repeat interval L of the vertical-stripe patterns and the array part of another ten columns or more is different in these array parts, and six or more types of pile yarns are arranged so that the same type of pile yarns may not be arranged adjacent to each other in any of the array parts of ten or more columns.

[0022]

More preferably, (10) 80% or more, preferably 90% or more pile yarns of the total number of pile yarns included in each section H_1 ($H_2 \cdot H_3 \cdot H_4$, etc.) of the pile yarns A-G being partitioned by the vertical and horizontal length R of the carpet tiles 11 have a type common to the pile yarns included in other sections H_2 ($H_3 \cdot H_4$, etc.).

[0023]

The difference of the pile length, that is, high piles and low piles, can be selectively formed by selectively changing the feed amount (tension) of pile yarns A-G being inserted into the base fabric 13 at each stitch cycle. Therefore, in a tufting machine, the rotational speed of a feed roll for feeding the pile yarns A-G to the base fabric 13 is selectively changed at each stitch cycle, the repeat interval T of the horizontal stripes 17 is controlled by optionally setting the change period, and the unrepeat horizontal-stripe patterns (17) are drawn on the pile surfaces by setting an irregular period. In order to make the horizontal-stripe patterns (17) distinct on the pile surfaces, the difference in the pile length between the high piles and the low piles is set to 2 mm or more. However, the difference in the pile length between the high piles and the low piles may also be set to less than 2 mm. When the difference of the pile length is set to less than 2 mm, a pattern with a distinct contour cannot be drawn on the pile surfaces by the high piles and the low piles; however, if the high piles and the low piles are formed at random without the particular objective of drawing a pattern with a fixed contour, depth can be given to the hue of the pile surfaces by a slight shade difference caused between the high piles and the low piles, not by the difference in the appearance of the pile yarns. Therefore, it is not necessarily required to set the difference of the pile length between the high piles and the low piles to 2 mm or more. Also, several types of piles with a pile length difference of high piles, intermediate piles, low piles, etc., can be formed.

[0024]

The difference in the pile shape, that is, cut piles and loop piles, can be selectively formed by determining whether the pile yarns A-G are immediately removed from a looper for trapping the pile yarns A-G inserted into the base fabric 13 in the tufting machine or are continuously trapped at each stitch cycle. For this purpose, the looper is selectively moved in the removing direction of the pile yarns at each stitch cycle, or a member for removing the pile yarns is selectively operated for the looper. The repeat interval T of the horizontal stripes 17 is controlled by optionally setting the period of the operation, and the unrepeat horizontal-stripe patterns (17) can be drawn on the pile surfaces by setting an irregular period. In this case, the difference in the pile yarns can also be given between the cut piles and the loop piles by

selectively changing the feed amount (tension) of pile yarns A-G being inserted into the base fabric 13 at each stitch cycle.

[0025]

The vertical-stripe patterns (18) being drawn on the pile surfaces are constituted by arranging the pile yarns A-G with different appearances at each stitch cycle, and the difference in the appearance of the pile yarns, as mentioned above, is due to the difference in any of the fiber materials constituting the pile yarns, color, single-yarn size, number of twists, twist direction, total number of fibers, number of single yarns, fiber crimp rate, etc. However, in order to arrange a beautiful appearance of the vertical-stripe patterns, in the pile yarns composed of synthetic fibers, a pigment mixed into the fiber material during spinning of the synthetic fibers, that is, during the original coloring, is changed, or a dye used in dyeing the fibers is changed. Preferably, pile yarns with different colors containing no opposite colors, that is, complementary colors, are used. As the pile yarns with different appearances, space-dyed yarns partially dyed with different colors and mixed yarns in which several types of single yarns with different colors are paralleled or double-twisted can also be used. If these space-dyed yarns or mixed yarns with different colors are used, even if the pile length and the pile shape (cut piles and loop piles) are the same, the pile length and the pile shape appear to change, and the vertical-stripe patterns (18) and the horizontal-stripe patterns (17) have a more sufficient change. If the double-twisted yarns with different twist directions are mixed, the double-twisted yarns may be mixed yarns with different colors constituted by single yarns with different colors. In two types of double-twisted yarns with different colors having different twist directions, the color of one type of pile yarn of these two types of yarns appears regularly in a spot shape on the pile surface, whereas another type of pile yarns is rubbed by the yarn through-hole of the needle during tufting, so that an untwisting torque is exerted. Thereby, twist irregularities are periodically generated, and a long stripe-shaped continuous part in which the single yarns with different colors are paralleled and a spot-shaped continuous part in which the untwisting torque is accumulated appear periodically in an alternate fashion. The stitch columns of these pile yarns become a piece pattern, so that the vertical-stripe patterns (18) have a more sufficient change.

[0026]

Effect of the invention

According to the present invention (Claim 1), even if the adjacent tile patterns in all directions are spread in a checkered pattern by changing the needle gauge direction N and the stitch gauge direction S by 90° as is conventional, as shown in Figure 2, the seams 19 between the carpet tiles are buried in the vertical-stripe patterns and become indistinct, and the artificial

line in which the carpet tiles are worked by carefully aligning the peripheral edges in a linear shape is difficult to notice. As a result, the stiffness is not felt, and a sense of release like a natural release from an artificial constraint is felt on the working surface.

[0027]

Then, even if the carpet tiles are spread in a grid pattern by aligning the needle gauge direction N and the stitch gauge direction S in the same direction, as shown in Figure 3, the vertical stripes 18 are not continuously straight in the stitch gauge direction S, and the vertical-stripe patterns (18) are divided into the straight continuous seams 19 in the needle gauge direction N, so that an appearance in which the patterns are partitioned by the straight continuous seams 19 in the needle gauge direction N and parts of the band-shaped horizontal-stripe patterns of the same repeat as the vertical and horizontal length R of the carpet tiles 11 are constituted is exhibited. On the other hand, the seams (19) to be continuously straight, shown along the peripheral edges (12) in the stitch gauge direction S, are buried within the band-shaped horizontal-stripe patterns being partitioned into the straight continuous seams 19 in the needle gauge direction N, so that the seams 19 between the carpet tiles in all directions are difficult to distinguish. Also, if the needle gauge direction N and the stitch gauge direction S are aligned in the same direction, even if the front and back orientations of the vertical-stripe patterns (18) in the needle gauge direction N are mistakenly worked, a sense of incompatibility due to the shade difference in the pile direction (a slight difference in the degree of pile inclination) between the adjacent carpet tiles is not exhibited.

[0028]

In particular, if all of the six or more of types pile yarns A-G with different appearances have the same color, the similarity of the hue among the carpet tiles is increased, and a calmness and peace of mind are felt from the working surface, so that a beautiful appearance with a sufficient change in the calm atmosphere can be expressed on the working surface.

[0029]

Also, if the repeat interval L of the vertical-stripe patterns is set to 0.6 times or more, a noninteger number of times, the vertical and horizontal length R of the carpet tiles 11, even if the repeat interval L is smaller than the vertical and horizontal size ($0.6 R \leq L < R$), since the pile yarns appearing in only one column within the repeat interval L are interposed in the surface of the carpet tile 11, the scattered appearance caused at random in some stitch columns by the misrecognition of the pile yarn lots and the thickness irregularity and the dyeing irregularity of the pile yarns to be originally avoided as slight drawbacks when tufting is not noticed as a slight

drawback. Therefore, an aesthetic effect similar to the increase of the type of pile yarns with different appearances is generated, and the working surface has a more sufficient change and is beautiful, and the product yield (tufted-pile linen and silk) when tufting is also improved.

[0030]

According to the present invention (Claims 2 and 3), even if the high piles and the low piles are selectively formed in some stitch columns of alternating columns or several alternate columns or the cut piles and the loop piles are selectively formed, the appearance of the piles of the stitch columns is intermittently changed, and an appearance in which the pile yarns with different colors are arranged is exhibited, so that the working surface has a more sufficient change and is beautiful.

[0031]

In particular, if the repeat interval L of the vertical-stripe patterns is set to 0.6 times or more, a noninteger number of times, the vertical and horizontal length R of the carpet tiles 11, even when the repeat interval L is smaller than the vertical and horizontal size ($0.6 R \leq L < R$), the pile yarns appearing only in one column within the repeat interval L are interposed in the surface of the carpet tile 11. Thus, even if high piles and low piles or cut piles and loop piles are generated at random in some stitch columns by the irregularities of the feed amount of pile yarns and the tension in addition to the misrecognition of lots of the pile yarns and the thickness irregularity and the dyeing irregularity of the pile yarns to be originally avoided as slight drawbacks when tufting, scattering of the appearance is not noticed as a slight drawback, and the product yield (tufted-pile linen and silk) when tufting is also improved.

[0032]

According to the present invention (Claim 4), a grid pattern in which the vertical stripes 18 and the horizontal stripes 17 are crossed in one sheet of carpet tile is formed. In particular, if the horizontal stripes 17 are band-shaped horizontal stripes with a width W narrower than the vertical and horizontal length R of the carpet tiles 11 and the width V of the part being sandwiched by the band-shaped horizontal stripe 17, and the band-shaped horizontal stripe 17 is wider than the vertical and horizontal length R of the carpet tiles 11, largely, two types of carpet tiles of the carpet tile in which only the vertical stripes 18 appear and the carpet tiles in which the horizontal stripes 17 and the vertical stripes 18 appear can be formed, and an appearance in which the carpet tiles smaller than the vertical and horizontal length R of the carpet tiles 11 are arranged in a spot shape and at random in part of the working surface arranged in a grid pattern

is exhibited. Thus, the array state of the carpet tiles is very natural, a lively motion is also felt, and the working surface has a more sufficient aesthetic change.

Brief description of the figures

Figure 1 is an oblique view showing the tufted-pile linen and silk of the present invention.

Figure 2 is an oblique view showing the working surface of the carpet tiles of the present invention.

Figure 3 is an oblique view showing the working surface of the carpet tiles of the present invention.

Figure 4 is an oblique view showing the tufted-pile linen and silk of the present invention.

Figure 5 is an oblique view showing the working surface of the carpet tiles of the present invention.

Figure 6 is an oblique view showing the tufted-pile linen and silk of the present invention.

Figure 7 is an oblique view showing the working surface of conventional carpet tiles.

Explanation of symbols:

11	Carpet tile
12	Peripheral edge
13	Base fabric
14	Pile
15	Tufted-pile linen and silk
16	Backing layer
17	Horizontal stripes (horizontal-stripe pattern)
18	Vertical stripes (vertical-stripe pattern)
19	Seam
20	Band-shaped stripe
A, B, C, D, E, F, G	Pile yarns
H	Section
K	Interval
L	Repeat of vertical-stripe pattern
N	Needle gauge direction
P	Needle gauge
Q	Stitch gauge

R	Vertical and horizontal size of carpet tile
S	Stitch gauge direction
T	Repeat of horizontal-stripe pattern
V, W	Width

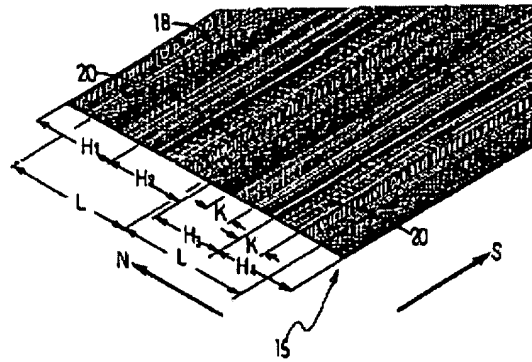


Figure 1

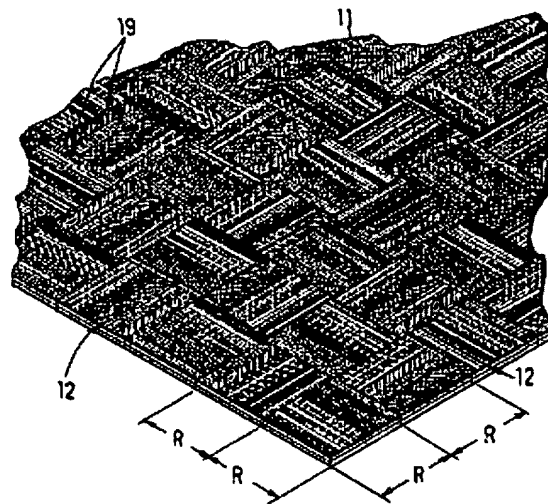


Figure 2

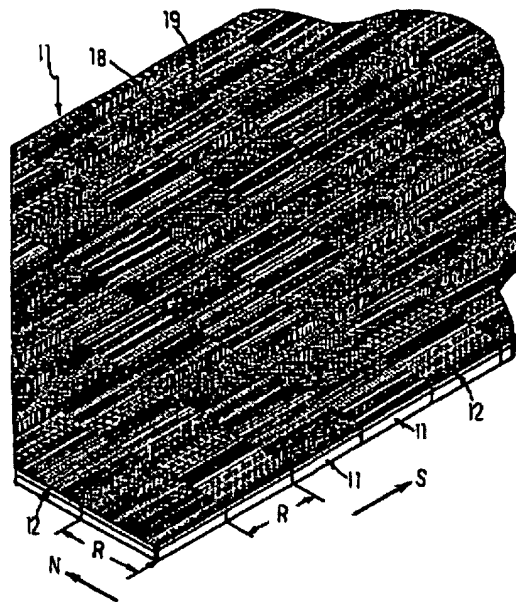


Figure 3

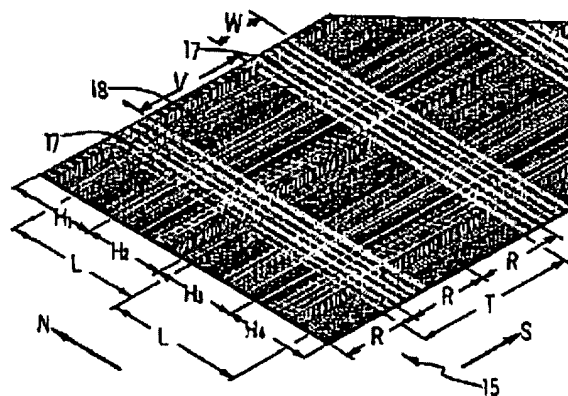


Figure 4

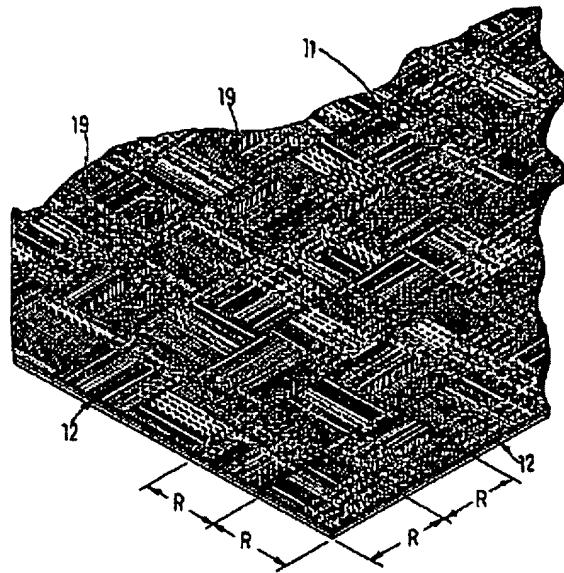


Figure 5

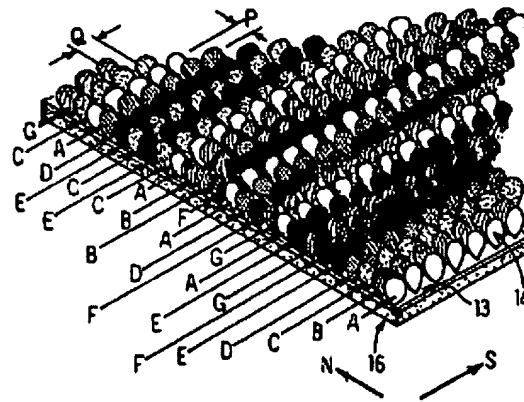


Figure 6

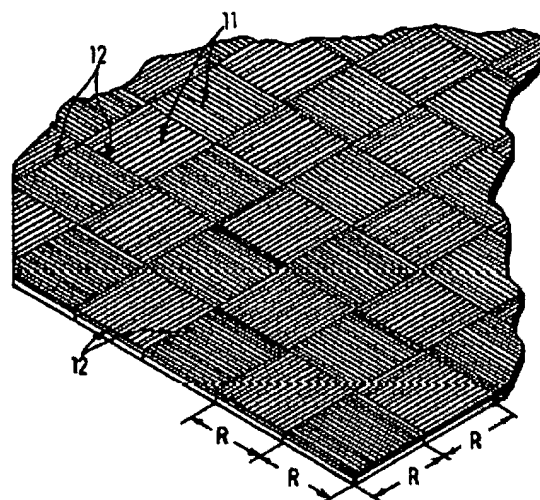


Figure 7

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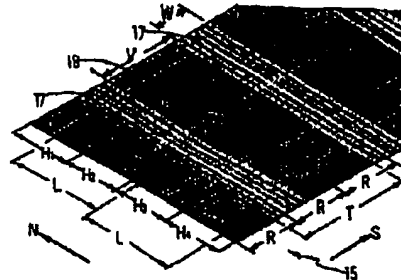
4L044 G001 G002 G005

(54) 【発明の名称】 タイルカーペット施工法

(57) 【要約】

【課題】 タイルカーペットの施工面に、自然で変化に富み、安らぎを与える美観を演出する。

【解決手段】 タフテッドパイル布帛15に裏打層18を積層し、正方形に裁断して成るタイルカーペット11を市松模様状に敷き貼めるタイルカーペットの施工法において、タフテイング時に外縁の異なる6種類以上のパイル糸を配列し、そのパイル糸が並んで構成する縦横模様のリピート間隔をタイルカーペットの縦横寸法Rの非整数倍となる0.4倍以上とし、タイルカーペットの縦横寸法Rで仕切られるパイル糸の配列の各区画H、に含まれるパイル糸の合計本数の70%以上のパイル糸が他の区画H、に含まれるパイル糸と種類を共通にするものとし、その区画H、と区画H、の間で共通するパイル糸の種類数を8種類以上とする。



(2)

特開2003-98854

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【特許請求の範囲】

【請求項1】 バイル糸(A~G)を2.5~4.0m/mの間隔(ニードルゲージP)をもって配列し、1.5~3.5m/mのステッチ間隔(ステッチゲージQ)をもって基布(13)にタフティングし、基布からの高さ(バイル厚)が2~7m/mのバイル(14)を形成したタフテッドバイル布帛(15)の裏側に裏打層(16)を積層し、ニードルゲージ方向(N)とステッチゲージ方向(S)に縦と横の方向を合わせて一辺の長さ(R)が30~60cmとなる正方形に裁断して成るタイルカーベットの(11)を、その縦横(12)が縦横に一直線状に並び格子状に周縁同士を突き合わせて床下地面に敷き始めて施工するタイルカーベットの施工法において;

(a) タフティング時に、繊維素材、色彩、単糸織度、織り数、織り方向、縦横織本数、単糸本数、繊維の繊維本等の相異に起因して外縁の異なる6種類以上のバイル糸(A~G)を使用して縦横織様をバイル面に織出し、(b) その6種類以上のバイル糸(A~G)が並んで構成する縦横織様のリピート間隔Lをタイルカーベットの(11)の縦横寸法(R)の所要数倍となる0.4倍以上とし、(c) ニードルゲージ方向(N)の任意の位置を基準とし、タイルカーベットの(11)の縦横寸法(R)をもって、その6種類以上のバイル糸(A~G)の配列を仕切るとき、その仕切られた各区域(H₁・H₂・H₃・H₄・H₅・H₆・H₇・H₈・H₉・H₁₀・H₁₁・H₁₂・H₁₃・H₁₄・H₁₅・H₁₆・H₁₇・H₁₈・H₁₉・H₂₀・H₂₁・H₂₂・H₂₃・H₂₄・H₂₅・H₂₆・H₂₇・H₂₈・H₂₉・H₃₀・H₃₁・H₃₂・H₃₃・H₃₄・H₃₅・H₃₆・H₃₇・H₃₈・H₃₉・H₄₀・H₄₁・H₄₂・H₄₃・H₄₄・H₄₅・H₄₆・H₄₇・H₄₈・H₄₉・H₅₀・H₅₁・H₅₂・H₅₃・H₅₄・H₅₅・H₅₆・H₅₇・H₅₈・H₅₉・H₆₀・H₆₁・H₆₂・H₆₃・H₆₄・H₆₅・H₆₆・H₆₇・H₆₈・H₆₉・H₇₀・H₇₁・H₇₂・H₇₃・H₇₄・H₇₅・H₇₆・H₇₇・H₇₈・H₇₉・H₈₀・H₈₁・H₈₂・H₈₃・H₈₄・H₈₅・H₈₆・H₈₇・H₈₈・H₈₉・H₉₀・H₉₁・H₉₂・H₉₃・H₉₄・H₉₅・H₉₆・H₉₇・H₉₈・H₉₉・H₁₀₀・H₁₀₁・H₁₀₂・H₁₀₃・H₁₀₄・H₁₀₅・H₁₀₆・H₁₀₇・H₁₀₈・H₁₀₉・H₁₁₀・H₁₁₁・H₁₁₂・H₁₁₃・H₁₁₄・H₁₁₅・H₁₁₆・H₁₁₇・H₁₁₈・H₁₁₉・H₁₂₀・H₁₂₁・H₁₂₂・H₁₂₃・H₁₂₄・H₁₂₅・H₁₂₆・H₁₂₇・H₁₂₈・H₁₂₉・H₁₃₀・H₁₃₁・H₁₃₂・H₁₃₃・H₁₃₄・H₁₃₅・H₁₃₆・H₁₃₇・H₁₃₈・H₁₃₉・H₁₄₀・H₁₄₁・H₁₄₂・H₁₄₃・H₁₄₄・H₁₄₅・H₁₄₆・H₁₄₇・H₁₄₈・H₁₄₉・H₁₅₀・H₁₅₁・H₁₅₂・H₁₅₃・H₁₅₄・H₁₅₅・H₁₅₆・H₁₅₇・H₁₅₈・H₁₅₉・H₁₆₀・H₁₆₁・H₁₆₂・H₁₆₃・H₁₆₄・H₁₆₅・H₁₆₆・H₁₆₇・H₁₆₈・H₁₆₉・H₁₇₀・H₁₇₁・H₁₇₂・H₁₇₃・H₁₇₄・H₁₇₅・H₁₇₆・H₁₇₇・H₁₇₈・H₁₇₉・H₁₈₀・H₁₈₁・H₁₈₂・H₁₈₃・H₁₈₄・H₁₈₅・H₁₈₆・H₁₈₇・H₁₈₈・H₁₈₉・H₁₉₀・H₁₉₁・H₁₉₂・H₁₉₃・H₁₉₄・H₁₉₅・H₁₉₆・H₁₉₇・H₁₉₈・H₁₉₉・H₂₀₀・H₂₀₁・H₂₀₂・H₂₀₃・H₂₀₄・H₂₀₅・H₂₀₆・H₂₀₇・H₂₀₈・H₂₀₉・H₂₁₀・H₂₁₁・H₂₁₂・H₂₁₃・H₂₁₄・H₂₁₅・H₂₁₆・H₂₁₇・H₂₁₈・H₂₁₉・H₂₂₀・H₂₂₁・H₂₂₂・H₂₂₃・H₂₂₄・H₂₂₅・H₂₂₆・H₂₂₇・H₂₂₈・H₂₂₉・H₂₃₀・H₂₃₁・H₂₃₂・H₂₃₃・H₂₃₄・H₂₃₅・H₂₃₆・H₂₃₇・H₂₃₈・H₂₃₉・H₂₄₀・H₂₄₁・H₂₄₂・H₂₄₃・H₂₄₄・H₂₄₅・H₂₄₆・H₂₄₇・H₂₄₈・H₂₄₉・H₂₅₀・H₂₅₁・H₂₅₂・H₂₅₃・H₂₅₄・H₂₅₅・H₂₅₆・H₂₅₇・H₂₅₈・H₂₅₉・H₂₆₀・H₂₆₁・H₂₆₂・H₂₆₃・H₂₆₄・H₂₆₅・H₂₆₆・H₂₆₇・H₂₆₈・H₂₆₉・H₂₇₀・H₂₇₁・H₂₇₂・H₂₇₃・H₂₇₄・H₂₇₅・H₂₇₆・H₂₇₇・H₂₇₈・H₂₇₉・H₂₈₀・H₂₈₁・H₂₈₂・H₂₈₃・H₂₈₄・H₂₈₅・H₂₈₆・H₂₈₇・H₂₈₈・H₂₈₉・H₂₉₀・H₂₉₁・H₂₉₂・H₂₉₃・H₂₉₄・H₂₉₅・H₂₉₆・H₂₉₇・H₂₉₈・H₂₉₉・H₃₀₀・H₃₀₁・H₃₀₂・H₃₀₃・H₃₀₄・H₃₀₅・H₃₀₆・H₃₀₇・H₃₀₈・H₃₀₉・H₃₁₀・H₃₁₁・H₃₁₂・H₃₁₃・H₃₁₄・H₃₁₅・H₃₁₆・H₃₁₇・H₃₁₈・H₃₁₉・H₃₂₀・H₃₂₁・H₃₂₂・H₃₂₃・H₃₂₄・H₃₂₅・H₃₂₆・H₃₂₇・H₃₂₈・H₃₂₉・H₃₃₀・H₃₃₁・H₃₃₂・H₃₃₃・H₃₃₄・H₃₃₅・H₃₃₆・H₃₃₇・H₃₃₈・H₃₃₉・H₃₄₀・H₃₄₁・H₃₄₂・H₃₄₃・H₃₄₄・H₃₄₅・H₃₄₆・H₃₄₇・H₃₄₈・H₃₄₉・H₃₅₀・H₃₅₁・H₃₅₂・H₃₅₃・H₃₅₄・H₃₅₅・H₃₅₆・H₃₅₇・H₃₅₈・H₃₅₉・H₃₆₀・H₃₆₁・H₃₆₂・H₃₆₃・H₃₆₄・H₃₆₅・H₃₆₆・H₃₆₇・H₃₆₈・H₃₆₉・H₃₇₀・H₃₇₁・H₃₇₂・H₃₇₃・H₃₇₄・H₃₇₅・H₃₇₆・H₃₇₇・H₃₇₈・H₃₇₉・H₃₈₀・H₃₈₁・H₃₈₂・H₃₈₃・H₃₈₄・H₃₈₅・H₃₈₆・H₃₈₇・H₃₈₈・H₃₈₉・H₃₉₀・H₃₉₁・H₃₉₂・H₃₉₃・H₃₉₄・H₃₉₅・H₃₉₆・H₃₉₇・H₃₉₈・H₃₉₉・H₄₀₀・H₄₀₁・H₄₀₂・H₄₀₃・H₄₀₄・H₄₀₅・H₄₀₆・H₄₀₇・H₄₀₈・H₄₀₉・H₄₁₀・H₄₁₁・H₄₁₂・H₄₁₃・H₄₁₄・H₄₁₅・H₄₁₆・H₄₁₇・H₄₁₈・H₄₁₉・H₄₂₀・H₄₂₁・H₄₂₂・H₄₂₃・H₄₂₄・H₄₂₅・H₄₂₆・H₄₂₇・H₄₂₈・H₄₂₉・H₄₃₀・H₄₃₁・H₄₃₂・H₄₃₃・H₄₃₄・H₄₃₅・H₄₃₆・H₄₃₇・H₄₃₈・H₄₃₉・H₄₄₀・H₄₄₁・H₄₄₂・H₄₄₃・H₄₄₄・H₄₄₅・H₄₄₆・H₄₄₇・H₄₄₈・H₄₄₉・H₄₅₀・H₄₅₁・H₄₅₂・H₄₅₃・H₄₅₄・H₄₅₅・H₄₅₆・H₄₅₇・H₄₅₈・H₄₅₉・H₄₆₀・H₄₆₁・H₄₆₂・H₄₆₃・H₄₆₄・H₄₆₅・H₄₆₆・H₄₆₇・H₄₆₈・H₄₆₉・H₄₇₀・H₄₇₁・H₄₇₂・H₄₇₃・H₄₇₄・H₄₇₅・H₄₇₆・H₄₇₇・H₄₇₈・H₄₇₉・H₄₈₀・H₄₈₁・H₄₈₂・H₄₈₃・H₄₈₄・H₄₈₅・H₄₈₆・H₄₈₇・H₄₈₈・H₄₈₉・H₄₉₀・H₄₉₁・H₄₉₂・H₄₉₃・H₄₉₄・H₄₉₅・H₄₉₆・H₄₉₇・H₄₉₈・H₄₉₉・H₅₀₀・H₅₀₁・H₅₀₂・H₅₀₃・H₅₀₄・H₅₀₅・H₅₀₆・H₅₀₇・H₅₀₈・H₅₀₉・H₅₁₀・H₅₁₁・H₅₁₂・H₅₁₃・H₅₁₄・H₅₁₅・H₅₁₆・H₅₁₇・H₅₁₈・H₅₁₉・H₅₂₀・H₅₂₁・H₅₂₂・H₅₂₃・H₅₂₄・H₅₂₅・H₅₂₆・H₅₂₇・H₅₂₈・H₅₂₉・H₅₃₀・H₅₃₁・H₅₃₂・H₅₃₃・H₅₃₄・H₅₃₅・H₅₃₆・H₅₃₇・H₅₃₈・H₅₃₉・H₅₄₀・H₅₄₁・H₅₄₂・H₅₄₃・H₅₄₄・H₅₄₅・H₅₄₆・H₅₄₇・H₅₄₈・H₅₄₉・H₅₅₀・H₅₅₁・H₅₅₂・H₅₅₃・H₅₅₄・H₅₅₅・H₅₅₆・H₅₅₇・H₅₅₈・H₅₅₉・H₅₆₀・H₅₆₁・H₅₆₂・H₅₆₃・H₅₆₄・H₅₆₅・H₅₆₆・H₅₆₇・H₅₆₈・H₅₆₉・H₅₇₀・H₅₇₁・H₅₇₂・H₅₇₃・H₅₇₄・H₅₇₅・H₅₇₆・H₅₇₇・H₅₇₈・H₅₇₉・H₅₈₀・H₅₈₁・H₅₈₂・H₅₈₃・H₅₈₄・H₅₈₅・H₅₈₆・H₅₈₇・H₅₈₈・H₅₈₉・H₅₉₀・H₅₉₁・H₅₉₂・H₅₉₃・H₅₉₄・H₅₉₅・H₅₉₆・H₅₉₇・H₅₉₈・H₅₉₉・H₆₀₀・H₆₀₁・H₆₀₂・H₆₀₃・H₆₀₄・H₆₀₅・H₆₀₆・H₆₀₇・H₆₀₈・H₆₀₉・H₆₁₀・H₆₁₁・H₆₁₂・H₆₁₃・H₆₁₄・H₆₁₅・H₆₁₆・H₆₁₇・H₆₁₈・H₆₁₉・H₆₂₀・H₆₂₁・H₆₂₂・H₆₂₃・H₆₂₄・H₆₂₅・H₆₂₆・H₆₂₇・H₆₂₈・H₆₂₉・H₆₃₀・H₆₃₁・H₆₃₂・H₆₃₃・H₆₃₄・H₆₃₅・H₆₃₆・H₆₃₇・H₆₃₈・H₆₃₉・H₆₄₀・H₆₄₁・H₆₄₂・H₆₄₃・H₆₄₄・H₆₄₅・H₆₄₆・H₆₄₇・H₆₄₈・H₆₄₉・H₆₅₀・H₆₅₁・H₆₅₂・H₆₅₃・H₆₅₄・H₆₅₅・H₆₅₆・H₆₅₇・H₆₅₈・H₆₅₉・H₆₆₀・H₆₆₁・H₆₆₂・H₆₆₃・H₆₆₄・H₆₆₅・H₆₆₆・H₆₆₇・H₆₆₈・H₆₆₉・H₆₇₀・H₆₇₁・H₆₇₂・H₆₇₃・H₆₇₄・H₆₇₅・H₆₇₆・H₆₇₇・H₆₇₈・H₆₇₉・H₆₈₀・H₆₈₁・H₆₈₂・H₆₈₃・H₆₈₄・H₆₈₅・H₆₈₆・H₆₈₇・H₆₈₈・H₆₈₉・H₆₉₀・H₆₉₁・H₆₉₂・H₆₉₃・H₆₉₄・H₆₉₅・H₆₉₆・H₆₉₇・H₆₉₈・H₆₉₉・H₇₀₀・H₇₀₁・H₇₀₂・H₇₀₃・H₇₀₄・H₇₀₅・H₇₀₆・H₇₀₇・H₇₀₈・H₇₀₉・H₇₁₀・H₇₁₁・H₇₁₂・H₇₁₃・H₇₁₄・H₇₁₅・H₇₁₆・H₇₁₇・H₇₁₈・H₇₁₉・H₇₂₀・H₇₂₁・H₇₂₂・H₇₂₃・H₇₂₄・H₇₂₅・H₇₂₆・H₇₂₇・H₇₂₈・H₇₂₉・H₇₃₀・H₇₃₁・H₇₃₂・H₇₃₃・H₇₃₄・H₇₃₅・H₇₃₆・H₇₃₇・H₇₃₈・H₇₃₉・H₇₄₀・H₇₄₁・H₇₄₂・H₇₄₃・H₇₄₄・H₇₄₅・H₇₄₆・H₇₄₇・H₇₄₈・H₇₄₉・H₇₅₀・H₇₅₁・H₇₅₂・H₇₅₃・H₇₅₄・H₇₅₅・H₇₅₆・H₇₅₇・H₇₅₈・H₇₅₉・H₇₆₀・H₇₆₁・H₇₆₂・H₇₆₃・H₇₆₄・H₇₆₅・H₇₆₆・H₇₆₇・H₇₆₈・H₇₆₉・H₇₇₀・H₇₇₁・H₇₇₂・H₇₇₃・H₇₇₄・H₇₇₅・H₇₇₆・H₇₇₇・H₇₇₈・H₇₇₉・H₇₈₀・H₇₈₁・H₇₈₂・H₇₈₃・H₇₈₄・H₇₈₅・H₇₈₆・H₇₈₇・H₇₈₈・H₇₈₉・H₇₉₀・H₇₉₁・H₇₉₂・H₇₉₃・H₇₉₄・H₇₉₅・H₇₉₆・H₇₉₇・H₇₉₈・H₇₉₉・H₈₀₀・H₈₀₁・H₈₀₂・H₈₀₃・H₈₀₄・H₈₀₅・H₈₀₆・H₈₀₇・H₈₀₈・H₈₀₉・H₈₁₀・H₈₁₁・H₈₁₂・H₈₁₃・H₈₁₄・H₈₁₅・H₈₁₆・H₈₁₇・H₈₁₈・H₈₁₉・H₈₂₀・H₈₂₁・H₈₂₂・H₈₂₃・H₈₂₄・H₈₂₅・H₈₂₆・H₈₂₇・H₈₂₈・H₈₂₉・H₈₃₀・H₈₃₁・H₈₃₂・H₈₃₃・H₈₃₄・H₈₃₅・H₈₃₆・H₈₃₇・H₈₃₈・H₈₃₉・H₈₄₀・H₈₄₁・H₈₄₂・H₈₄₃・H₈₄₄・H₈₄₅・H₈₄₆・H₈₄₇・H₈₄₈・H₈₄₉・H₈₅₀・H₈₅₁・H₈₅₂・H₈₅₃・H₈₅₄・H₈₅₅・H₈₅₆・H₈₅₇・H₈₅₈・H₈₅₉・H₈₆₀・H₈₆₁・H₈₆₂・H₈₆₃・H₈₆₄・H₈₆₅・H₈₆₆・H₈₆₇・H₈₆₈・H₈₆₉・H₈₇₀・H₈₇₁・H₈₇₂・H₈₇₃・H₈₇₄・H₈₇₅・H₈₇₆・H₈₇₇・H₈₇₈・H₈₇₉・H₈₈₀・H₈₈₁・H₈₈₂・H₈₈₃・H₈₈₄・H₈₈₅・H₈₈₆・H₈₈₇・H₈₈₈・H₈₈₉・H₈₉₀・H₈₉₁・H₈₉₂・H₈₉₃・H₈₉₄・H₈₉₅・H₈₉₆・H₈₉₇・H₈₉₈・H₈₉₉・H₉₀₀・H₉₀₁・H₉₀₂・H₉₀₃・H₉₀₄・H₉₀₅・H₉₀₆・H₉₀₇・H₉₀₈・H₉₀₉・H₉₁₀・H₉₁₁・H₉₁₂・H₉₁₃・H₉₁₄・H₉₁₅・H₉₁₆・H₉₁₇・H₉₁₈・H₉₁₉・H₉₂₀・H₉₂₁・H₉₂₂・H₉₂₃・H₉₂₄・H₉₂₅・H₉₂₆・H₉₂₇・H₉₂₈・H₉₂₉・H₉₃₀・H₉₃₁・H₉₃₂・H₉₃₃・H₉₃₄・H₉₃₅・H₉₃₆・H₉₃₇・H₉₃₈・H₉₃₉・H₉₄₀・H₉₄₁・H₉₄₂・H₉₄₃・H₉₄₄・H₉₄₅・H₉₄₆・H₉₄₇・H₉₄₈・H₉₄₉・H₉₅₀・H₉₅₁・H₉₅₂・H₉₅₃・H₉₅₄・H₉₅₅・H₉₅₆・H₉₅₇・H₉₅₈・H₉₅₉・H₉₆₀・H₉₆₁・H₉₆₂・H₉₆₃・H₉₆₄・H₉₆₅・H₉₆₆・H₉₆₇・H₉₆₈・H₉₆₉・H₉₇₀・H₉₇₁・H₉₇₂・H₉₇₃・H₉₇₄・H₉₇₅・H₉₇₆・H₉₇₇・H₉₇₈・H₉₇₉・H₉₈₀・H₉₈₁・H₉₈₂・H₉₈₃・H₉₈₄・H₉₈₅・H₉₈₆・H₉₈₇・H₉₈₈・H₉₈₉・H₉₉₀・H₉₉₁・H₉₉₂・H₉₉₃・H₉₉₄・H₉₉₅・H₉₉₆・H₉₉₇・H₉₉₈・H₉₉₉・H₁₀₀₀・H₁₀₀₁・H₁₀₀₂・H₁₀₀₃・H₁₀₀₄・H₁₀₀₅・H₁₀₀₆・H₁₀₀₇・H₁₀₀₈・H₁₀₀₉・H₁₀₁₀・H₁₀₁₁・H₁₀₁₂・H₁₀₁₃・H₁₀₁₄・H₁₀₁₅・H₁₀₁₆・H₁₀₁₇・H₁₀₁₈・H₁₀₁₉・H₁₀₂₀・H₁₀₂₁・H₁₀₂₂・H₁₀₂₃・H₁₀₂₄・H₁₀₂₅・H₁₀₂₆・H₁₀₂₇・H₁₀₂₈・H₁₀₂₉・H₁₀₃₀・H₁₀₃₁・H₁₀₃₂・H₁₀₃₃・H₁₀₃₄・H₁₀₃₅・H₁₀₃₆・H₁₀₃₇・H₁₀₃₈・H₁₀₃₉・H₁₀₄₀・H₁₀₄₁・H₁₀₄₂・H₁₀₄₃・H₁₀₄₄・H₁₀₄₅・H₁₀₄₆・H₁₀₄₇・H₁₀₄₈・H₁₀₄₉・H₁₀₅₀・H₁₀₅₁・H₁₀₅₂・H₁₀₅₃・H₁₀₅₄・H₁₀₅₅・H₁₀₅₆・H₁₀₅₇・H₁₀₅₈・H₁₀₅₉・H₁₀₆₀・H₁₀₆₁・H₁₀₆₂・H₁₀₆₃・H₁₀₆₄・H₁₀₆₅・H₁₀₆₆

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く、その施工面からは特別な美観は習得されない。このため、周縁が縦横に一直線状に揃って整然とした施工面は、管理下で人為的に一直線状に揃えられていると言う印象を与え、時として管理下にあるが如く束縛された重苦しい印象さえも与える。

【0006】

【発明の目的】そこで本発明は、タイルカーベットの施工面を、美的に自然に変化に富み、周縁部や安らぎを与えるものにするを目的とする。

【0007】

【課題を解決するための手段】本発明は、バイル糸A～Gを2.5～4.0m/mの間隔（ニードルグージ）Pをもって配列し、1.5～3.5m/mのステッチ間隔（ステッチグージ）Qをもって基布13にタフティングし、基布からの高さ（バイル厚）が2～7m/mのバイル14を形成したタフテッドバイル布帛15の裏面に裏打層16を積層し、ニードルグージ方向Nとステッチグージ方向Sに縦と横の方向を合わせて一辺の長さRが30～80cmとなる正方形に裁断して成るタイルカーベットの1枚を、その周縁12が縦横に一直線状に並ぶ格子状に周縁同士を突き合わせて床下地面に敷き始めて施工するタイルカーベットの施工法において、(a) タフティング時に、縦横糸材、色彩、単糸密度、撚り数、撚り方向、縦横撚本数、単糸本数、縦横の撚率等の相異に起因して外観の異なる6種類以上のバイル糸A～Gを使用して縦横縞縞をバイル面に描出し、(b) その6種類以上のバイル糸A～Gが並んで構成する縦横縞縞のリピート間隔Lをタイルカーベットの1枚の縦横寸法Rの非整数倍となる0.4倍以上とし、(c) ニードルグージ方向Nの任意の位置を基準とし、タイルカーベットの1枚の縦横寸法Rをもって、その6種類以上のバイル糸A～Gの配列を仕切るとき、その仕切られた各区分H₁、(H₁・H₂・H₃・……)に含まれるバイル糸の合計本数の70%以上のバイル糸が、他の区分H₂、(H₂・H₃・……)に含まれるバイル糸と種類を共通にするものとし、(d) その区分H₁と区分H₂、(H₁・H₂・……)の間で共通するバイル糸の種類数を6種類以上にしたことを第1の特徴とする。

【0008】本発明の第2の特徴は、上記第1の特徴に加え、何れかのバイル糸により高バイルと低バイルを選択的に形成したことにある。

【0009】本発明の第3の特徴は、上記第1と第2の何れかの特徴に加え、何れかのバイル糸によりカットバイルとループバイルを選択的に形成したことにある。

【0010】本発明の第4の特徴は、上記第1と第2と第3の何れかの特徴に加え、高バイルと低バイルとのバイルの形態の差異によって、ニードルグージ方向Nに続く横縞17をバイル面に形成し、その横縞17の間隔をリピート間隔Tをタイルカーベットの1枚の縦横寸法Rの非

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数倍となる0.4倍以上にしたことにある。

【0011】

【発明の実施の形態】本発明において、「非整数倍」とは、0.4倍以上であり、0.8倍以上」とは、0.4倍以上であっても、タイルカーベットの1枚の縦横寸法Rが縦横縞縞のリピート間隔Lの2倍になったり、タイルカーベットの1枚の縦横寸法Rが縦横縞縞のリピート間隔Lと同じになったり、縦横縞縞のリピート間隔Lがタイルカーベットの1枚の縦横寸法Rの2倍、3倍、4倍……と整数倍になり、製造過程で裁断されてニードルグージ方向Nに並ぶ縦横縞縞のタイルカーベットの1枚の中に、6種類以上のバイル糸A～Gの配列順序（縦横縞縞）が一致したタイルカーベットが現れることがないことを意味する。図8は、色彩が異なるバイル糸A、バイル糸B、バイル糸C、バイル糸D、バイル糸E、バイル糸F、バイル糸Gの合計7種類のバイル糸を基布13にタフティングしてバイル14を形成したタフテッドバイル布帛15の斜視図であり、その7種類のバイル糸A～Gが無規則に配列されている状態を示す。図8に示すように本発明では外観の異なる6種類以上のバイル糸A～Gを使用するので、図1に示すように、縦横縞縞がバイル面に形成されることになるが、その6種類以上のバイル糸A～Gが並んで構成する縦横縞縞のリピート間隔Lをタイルカーベットの1枚の縦横寸法Rの非整数倍となる0.4倍以上にすると、図1に示すように、製造過程で裁断されてニードルグージ方向Nに並ぶ縦横縞縞のタイルカーベットの縦横縞縞（18）に、そのリピート間隔Lとタイルカーベットの縦横寸法Rとの不一致による軋ズレが生じ、それら縦横縞縞のタイルカーベットの縦横縞縞がそれぞれ異なるものとなり、又、各タイルカーベットの縦横縞18（バイル糸A～G）の配列順序に規則性（リピート）のないランダム縦横縞縞となる。

【0012】縦横縞縞を構成する何れかのバイル糸によって長短差が3m/m以上となる高バイルと低バイルを選択的に形成し、或いは、何れかのバイル糸によってカットバイルとループバイルを選択的に形成するとき、その高バイルと低バイル或いはカットバイルとループバイルとのバイルの形態の差異による外観上の相異が生じ、結果的にはバイル糸の種類数を増やした同じことになり、そのバイルの形態の差異によってバイル面が美的変化に富むものになり、縦縞18（バイル糸A～G）の配列順序に規則性（リピート）のないランダムな縦横縞縞が描出される。当然のことながら、タフテッドバイル布帛15のニードルグージ方向Nにおける寸法（タフティング幅ないし横幅）は、タイルカーベットの縦横寸法Rの2倍以上とし、タイルカーベットの1枚がニードルグージ方向Nに2枚以上並んでつくられるようにする。一般に、タイルカーベットの縦横寸法Rを50cmに設定し、有効幅が200cmのタフテッドバイル布帛15に裏打層16を積層したカーベットの裏面を裁断してつ

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くられ(図1)、その十数枚を1セットに梱包している
ので、本発明のタイルカーベットの、ニードルゲージ方
向Nに並んで敷設される縦線模様異なる数種類のタイル
カーベットの十数枚1セットに梱包され、その梱包を
解いて順次施工されることになる。図2は、その4種類
のタイルカーベットの、前後左右において隣合うタイル
カーベットに対してニードルゲージ方向Nとステッチゲ
ージ方向Sを90度変えて格子状に隣接同士を突き合わ
せて床下地面に敷き貼めた施工面を示す。図3は、その
4種類のタイルカーベットの、前後左右において隣合う
タイルカーベットに対してニードルゲージ方向Nとステ
ッチゲージ方向Sを同じ方向に揃えて格子状に隣接同士
を突き合わせて床下地面に敷き貼めた施工面を示す。

【0013】高パイルと低パイルとのパイル長の差、或
いは、カットパイルとループパイルとのパイルの形態の
差異によってニードルゲージ方向Nに続く横筋17をパ
イル面に形成し、その横筋17の現れるリビート間隔T
をタイルカーベット11の縦寸法Rの0.4倍以上、
好ましくは非整数倍となる0.7~1.8倍、更に好ま
しくは非整数倍となる0.8~1.4倍にすると、そ
の横筋17の現れる位置が、裁断されてステッチゲ
ージ方向Sに数枚のタイルカーベットのそれぞれにおいて
異なることになるので、その裁断された殆ど全てのタイル
カーベットが、横筋17や横筋18の位置の相違によ
って外観の異なるものとなる。横筋17を帯状に形成す
る場合、その帯状を成す横筋17の幅Wは、タイルカー
ベット11の縦寸法Rよりも狭く、好ましくはタイル
カーベット11の縦寸法Rの半分以下にする。しか
し、その帯状横筋17と帯状横筋17に含まれる縦筋状
部分の幅Vは、タイルカーベット11の縦寸法Rより
広くてもよい。そうすると、タイルカーベットの大きく
分けて横筋18だけが現れるタイルカーベットと横筋1
7と横筋18が現れるタイルカーベットの2種類にな
る。図4は、図1に示す有効幅が200cmのタフナ
ッドパイル布帛に78cmのリビート間隔Tをもって幅W
が20cmの帯状横筋17を備出したタフナッドパイル
布帛15を図示し、図5は、そのタフナッドパイル布帛
15を使用したタイルカーベットの前後左右においてニ
ードルゲージ方向Nとステッチゲージ方向Sを90度変
えて格子状に隣接同士を突き合わせて床下地面に敷き貼
めた施工面を示す。

【0014】図5が示すように、縦線模様と横線模様
による外観が異なっている、各タイルカーベットは、縦
寸法Rが同じであり、8種類以上の色彩の異なる縞筋
が無規則に並んだ縦線模様を有し、70%以上のパイル
糸が外観を同じくするものであり、パイル面の色調を同
じくする。このため、縦線模様の縞筋においてパイル糸
A~Gの配列に相違があっても一見しただけでは判然と
せず、その外観の異なるタイルカーベットの隣接同士を
突き合わせて施工しても、結柄やロットの異なるタイル

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カーベットが混在しているとの印象を与えない。

【0015】一般に、複数のカーペット販売会社の積布
するそれぞれのカーベット見本帳の中に、色彩が全く同
じのパイル糸が使用されており、ただ模様の縞筋だけが
異なる見本片(カーベットの縦断片)が貼付されている
場合、その見本片を見比べただけでは、その見本片が何
れの販売会社の商品(カーベット)から切り取られたの
か、その見本片的に表示する商品(カーベット)を特定す
ることが出来ず、商品の出所につき後戻りが生じる。

それと同じように、本発明において外観の異なるタイル
カーベットが格子状に敷設されて施工されていても、結
柄やロットの異なるタイルカーベットが混在している
との印象を与えず、同一結柄の同一ロットのタイルカー
ベットが施工されているとの印象を与えることになる。

【0016】特に、8種類以上の何れか同種類のパイル
糸が3列以上のステッチ列にわたって連続して隣合
わず、且つ、8種類以上のパイル糸A~Gの中の何れか2
種類のパイル糸が10列以上のステッチ列において交互
隣合って並ぶことがないように、即ち、縦線模様のリビ
ート間隔Lに含まれる何れか10列以上の配列部分と他
の何れか10列以上の配列部分の間で、それら配列部分
に含まれる各種類のパイル糸の配列順序が異なり、且
つ、その10列以上の何れの配列部分においても同種類
のパイル糸が隣合って並ばないように8種類以上のパ
イル糸を配列すると、施工されて隣合うタイルカーベ
ットとタイルカーベットの間の縫目19が、縦線模様の
一部の縦筋の如き態を呈し、その縦線模様に埋もれて目
立たなくなる。このため、施工面はタイルカーベットが
縫目なく連続しているかの如き態を呈し、そのような施
工面からは、タイルカーベットの縦線模様を注意深く一直
線状に揃えて施工したと云う人為的痕跡は取返し難く、縦
線模様に規則性がないことと相俟って、自由に敷設され
たかの如き安堵感や隠微感さえも感じられるように
なる。

【0017】このような美的効果は、縦線模様の無規則
性と、各タイルカーベットの色彩の共通性に起因する視
覚上の効果であるが、その効果を高めるためには、

(1) パイル糸A~Gの種類を10種類以上と限りなく
多くし、(2) 8種類以上の何れか同種類のパイル糸
(B)が3列以上のステッチ列にわたって連続して隣合
うことなくそれら8種類以上のパイル糸A~Gを配列
し、(3) タイルカーベットの縦寸法Rによって仕
切られるパイル糸の配列の各区分H、 $\cdot H_1 \cdot H_2 \cdot H_3 \cdot H_4$
.....に共通して含まれるパイル糸の種類を10種類
以上と限りなく多くする。

【0018】更に好ましくは、(4) その区分内H、
($H_1 \cdot H_2 \cdot H_3 \cdot H_4 \cdot H_5 \cdot H_6 \cdot H_7 \cdot H_8 \cdot H_9 \cdot H_{10}$)において、タイルカーベ
ットの縦寸法Rの10分の1以上のニードルゲージ方向
Nにおける区隔内Kに含まれる数種類のパイル糸の配列
によって構成される帯状筋20と、パイル糸の種類と配

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列順序を同じとする同じ帯状部20が3条以上形成されないようにする。即ち、区画内に外縁を同じとする広い帯状部20を形成するとしても、その数を2条とし、その広い帯状部20によってタイルカーベットの外縁が特徴づけられることがないように、つまり、縦断されてニードルゲージ方向Nに並ぶ複数枚のタイルカーベットの縦断模様が近似しないようにする。

【0019】更に好ましくは、(5) その何れかの区画内H、と他の何れかの区画H、(H、・H、……)の区画において共通する10種類以上のパイル糸の中の少なくとも5種類の各パイル糸の本数の各区画H、とH、(H、・H、……)における変動率が50%以上にする。即ち、任意の種類のパイル糸の最も多く含まれる何れかの区画H、におけるパイル糸の本数を100本とした場合、その同種類のパイル糸の最も少なく含まれる何れかの区画H、(H、・H、……)における本数を50本以上にする。

【0020】更に好ましくは、(6) 8種類以上のパイル糸A～Gが並んで構成する縦断模様のリビート間隔しを、タイルカーベット11の縦断寸法Rの非整数倍となる0.8～1.4倍、又は、タイルカーベット11の縦断寸法Rの非整数倍となる2.1倍以上、或いは3.1倍以上と限りなく大きくする。縦断に言えば、縦断模様のリビート間隔しをタフテッドパイル布15のタフテイング幅(前幅)以上にし、パイル糸の配列順序を無リビート(繰り返し無し)にする。同様に、(7) パイル糸の差やパイルの形態の差によって抽出される模様17の現れるリビート間隔Tも、タイルカーベット11の縦断寸法Rの非整数倍となる0.8～1.4倍、又は、タイルカーベットの縦断寸法Rの非整数倍となる2.1倍以上、或いは3.1倍以上と限りなく大きくする。縦断に言えば、タフテッドパイル布15の全長にわたって抽出される縦断模様を繰り繰り返さない無リビートする。

【0021】更に好ましくは、前記の通り、(8) 8種類以上のパイル糸A～Gの中の何れか2種類のパイル糸(C・E)が10列以上のステッチ列において交互割合って並ぶことなくそれら8種類以上のパイル糸A～Gを配列し、又、(8) 縦断模様のリビート間隔しに含まれる何れか10列以上の配列部分と他の何れか10列以上の配列部分の間で、それら配列部分に含まれる各種類のパイル糸の配列順序が異なり、且つ、その10列以上の何れの配列部分においても同種類のパイル糸が割合って並ばないように8種類以上のパイル糸を配列する。

【0022】更に好ましくは、(10) タイルカーベット11の縦断寸法Rで仕切られるパイル糸A～Gの配列の各区画H、(H、・H、・H、……)に含まれるパイル糸の合計本数の80%以上、好ましくは90%以上のパイル糸が、他の区画H、(H、・H、……)に含まれるパイル糸の種類を共通にするものとする。

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【0023】パイル糸の差、即ち、高パイルと低パイルは、基布13に差し込まれるパイル糸A～Gの供給量(テンション)をステッチサイクル毎に選択的に変えて選択的に形成することが出来る。従って、タフテッド織においてパイル糸A～Gを基布13に送り出すフィードロールの回転速度をステッチサイクル毎に選択的に変えることとし、その変える周知を任意に設定して模様17の現れるリビートTを加減し、その周知を不規則に設定することによって無リビートの縦断模様(17)をパイル面に抽出する。パイル面にハッキリした縦断模様(17)が抽出されるようにするには、高パイルと低パイルのパイル糸の差を2mm以上にする。しかし、高パイルと低パイルのパイル糸の差は2mm以下であってもよい。そのようにパイル糸の差を2mm以下にすると、高パイルと低パイルによってパイル面に輪郭がハッキリした図柄を抽出することが出来ないが、特に、一定の輪郭のある図柄を抽出することを目的とせず、高パイルと低パイルをランダムに形成すると、パイル糸の外縁上の粗度によってではなく、高パイルと低パイルの間に生じる微かな陰影の差によってパイル面の色調に異みを付与することが出来る。従って、高パイルと低パイルのパイル糸の差を2mm以上にする必要は必ずしもない。又、高パイル、中パイル、低パイル……と、パイル糸の差による数種類のパイルを形成することも出来る。

【0024】パイルの形態の差、即ち、カットパイルとループパイルは、タフテッド織において基布13に差し込まれたパイル糸A～Gを繰返すルーパーから、その繰返したパイル糸A～Gを直ちに外すか繰返し続けるかをステッチサイクル毎に決定して択一的に形成することが出来る。そのためには、ステッチサイクル毎にパイル糸が外れる方向にルーパーを選択的に移動し、或いは、パイル糸を外す部材をルーパーに選択的に作用させる。その操作の周知を任意に設定して模様17の現れるリビートTを加減し、その周知を不規則に設定することによって無リビートの縦断模様(17)をパイル面に抽出することが出来る。その場合、基布13に差し込まれるパイル糸A～Gの供給量(テンション)をステッチサイクル毎に選択的に変えてカットパイルとループパイルの間にパイル糸の差をつけることも出来る。

【0025】パイル面に抽出される縦断模様(18)は、各ステッチ列毎に外縁の異なるパイル糸A～Gを配列したことによるものであるが、そのパイル糸の外縁の粗度は、前記の通り、パイル糸を構成する繊維素材、色彩、単糸細度、撚り数、撚り方向、繊維結本数、単糸本数、繊維の捻縮率等の何れの粗度に起因するものでもよい。しかし、縦断模様の美観を重んじるには、合成繊維に成るパイル糸ではその合成繊維の結糸時、即ち、原料時に繊維素材に配合される顔料を減え、或いは、繊維の染色に使用する染料を減え、好ましくは補色となる反対色を含まない同系色の色彩の異なる顔料色のパイル糸を

(6)

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用する。外観の相異なるパイル糸には、部分的に異色に染色されたスペースダイ糸や、色彩の異なる数種類の単糸を引き混ぜ、或いは、合染した異色混合糸を使用することも出来る。そのようなスペースダイ糸や異色混合糸を使用すると、パイル長やパイルの形態（カットパイルとループパイル）が同じであってもパイル長やパイルの形態が変化しているかの如き趣を呈し、縦縞模様（18）や横縞模様（17）が一層変化に富んだものとなる。送り方向の相異なる合染糸を混用する場合、その合染糸は、色彩の異なる単糸によって構成された異色混合糸とするとよい。そのように送り方向の相異なる2種類の異色混合糸では、その2種類の中の1種類のパイル糸の色彩が遠点状に規則的にパイル面に現れる一方、他の1種類のパイル糸にはタフテイング時にニードルの糸通孔に施されて解離トルクが作用し、送り遅が周期的に発生し、その色彩の異なる単糸が引き寄せられているかの如く長く縞状に続く部分と、解離トルクが作用して遠点状に続く部分が交互に周期的に現れ、そのパイル糸のステッチ列が主従縞模になり、縦縞模様（18）が一層変化に富んだものとなる。

【0028】

【発明の効果】本発明（請求項1）によると、従来同様の前後左右において隣合うタイルカーペットに対してニードルゲージ方向Nとステッチゲージ方向Sを80度度えて市松模様に敷き詰めると、図2に示すように、タイルカーペットとタイルカーペットの間の縫ぎ目19が縦縞模様にも埋もれて目立たず、周縁を往復する一直線状に敷いてタイルカーペットを施工したと云う人為的感跡は消滅しなくなり、その結果、密着しさを感ぜず、自然で人為的束縛から解放されたかの如き解放感が施工面に感じられるようになる。

【0027】そして、ニードルゲージ方向Nとステッチゲージ方向Sを同じ方向に敷いて格子模様状に敷き詰めると、図3に示すように、縦縞18がステッチゲージ方向Sを真っ直ぐ連続することはなく、縦縞模様（18）が、ニードルゲージ方向Nに真っ直ぐ連続した縫ぎ目19に分割され、そのニードルゲージ方向Nに真っ直ぐ連続した縫ぎ目19に区切られてタイルカーペット11の縦横寸法Rと同じリピートの形状模様の一部を成すが如き趣を呈する一方、ステッチゲージ方向Sの縦縞（12）に沿って真っ直ぐ連続して現れるべき縫ぎ目（19）は、ニードルゲージ方向Nに真っ直ぐ連続した縫ぎ目19に区切られる帯状模様の模様に埋もれて、前後左右のタイルカーペットとタイルカーペットの間の縫ぎ目19が一層目立ちにくく、又、ニードルゲージ方向Nとステッチゲージ方向Sを同じ方向に敷いて施工する場合において、ニードルゲージ方向Nにおける縦縞模様（18）の前後の向きを見誤って施工しても、パイルの方向性（パイルの傾き具合の微かな相異）に起因する横縞模様が隣合うタイルカーペット間に生じて違和感を呈するこ

ともなくなる。

【0028】特に、外観の異なる6種類以上の全てのパイル糸A～Gを同色系にするとタイルカーペット間での色調の共通性が高まり、施工面からは着目した安らぎが感じられるようになり、その着目感のある環境の中にも変化に富んだ美観を施工面に表現することが出来る。

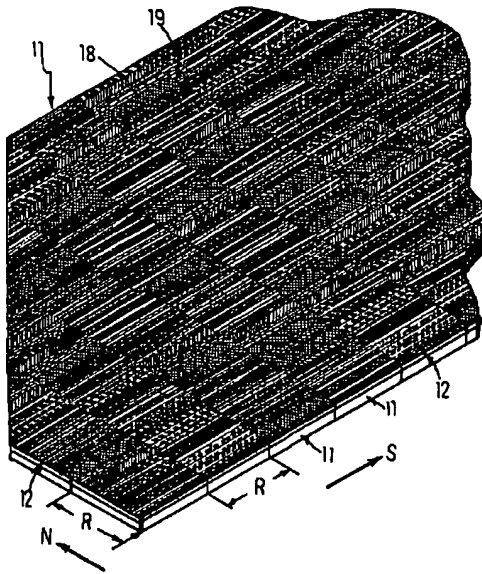
【0029】又、縦縞模様のリピート間隔Lをタイルカーペット11の縦横寸法Rの非整数倍となる0.8倍以上にすると、そのリピート間隔Lが縦横寸法以下（0.8R≦L<R）の場合でもリピート間隔L内の1列にしか現れないパイル糸がタイルカーペット11の表面に介在することになるので、タフテイング時に本来欠点として回避されるべきパイル糸のロットの誤配やパイル糸の太さの違や染色差によって一部のステッチ列にランダムに生じた外観上のバラツキも欠点としては消滅されず、却って、外観の異なるパイル糸の種類を増やしたと同様の美的効果を生じ、施工面が一層変化に富んだ美しいものとなり、又、タフテイング時の製品（タフテッドパイル布帛）の歩留りも向上する。

20 【0030】本発明（請求項2と請求項3）によると、一列おき、或いは、数列おきとなる一部のステッチ列で高パイルと低パイルを選択的に形成し、或いは、カットパイルとループパイルを選択的に形成しても、そのステッチ列のパイルの外観が途切れ途切れに変化し、色彩の異なるパイル糸が配列されているかの如き趣を呈し、施工面が一層変化に富んだ美しいものとなる。

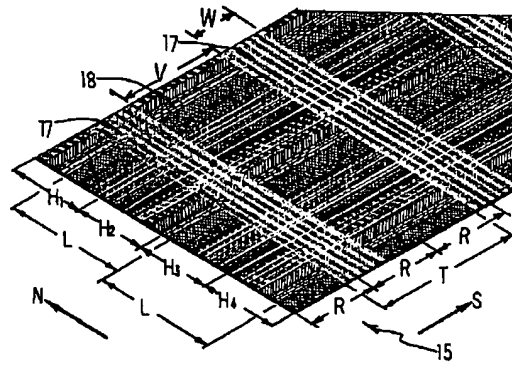
【0031】特に、縦縞模様のリピート間隔Lをタイルカーペット11の縦横寸法Rの非整数倍となる0.8倍以上にすると、そのリピート間隔Lが縦横寸法以下（0.8R≦L<R）の場合でもリピート間隔L内の1列にしか現れないパイル糸がタイルカーペット11の表面に介在することになるので、タフテイング時に本来欠点として回避されるべきパイル糸のロットの誤配やパイル糸の太さの違や染色差に加え、パイル糸の供給量やテンションの差によって一部のステッチ列に高パイルと低パイル、或いは、カットパイルとループパイルがランダムに生じて外観上のバラツキも欠点としては消滅されず、タフテイング時の製品（タフテッドパイル布帛）の歩留りが一層向上する。

40 【0032】本発明（請求項4）によると、一枚のタイルカーペットの中に縦縞18と横縞17が交叉した格子模様が形成されることになり、特に、横縞17をタイルカーペット11の縦横寸法Rよりも狭い幅Wの帯状模様のとし、その帯状模様の17と帯状模様の17に挟まれる部分の幅Vをタイルカーペット11の縦横寸法Rよりも広くすると、大別して縦縞18だけが現れたタイルカーペットと横縞17と縦縞18が現れたタイルカーペットとの2種類のタイルカーペットが出来、格子模様状に並んだ施工面の一部に、タイルカーペット11の縦横寸法Rよりも小さいタイルカーペットがスポット的に、且つ、

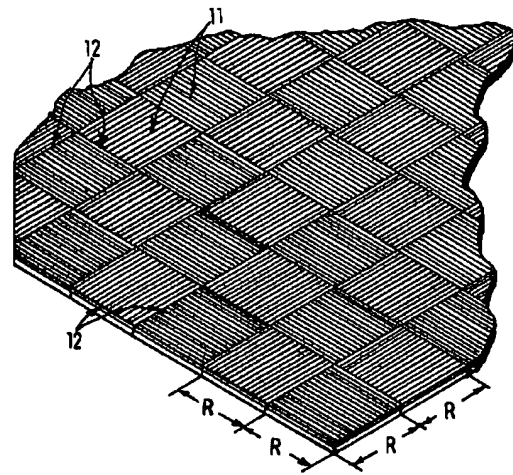
【図3】



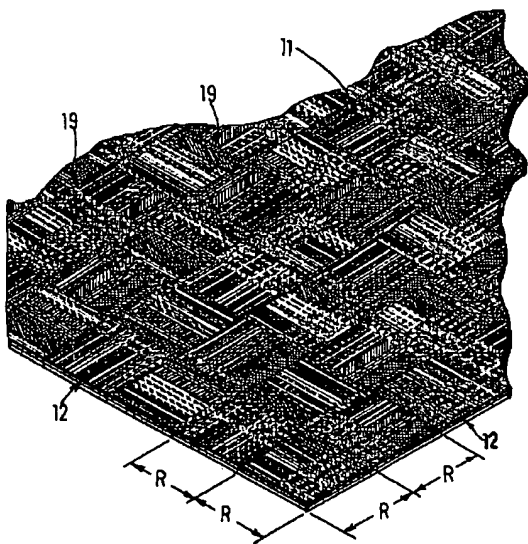
【図4】



【図7】



【図5】



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